D.O.T. 66

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENT CORRESPONDENCE

FILE

EDS-545(24) Toombs County

OFFICE Preconstruction

P. I. No. 52218Q

DATE

July 30, 2001

FROM

Wayne Hutto, Assistant Director of Preconstruction

TO

· SEE DISTRIBUTION

SUBJECT REVISED PROJECT CONCEPT REPORT APPROVAL

Attached for your files is the approval for subject project.

CWH/cj

Attachment

DISTRIBUTION:

· Tom Turner

David Mulling

Harvey Keepler

Jerry Hobbs -

Herman Griffin

Michael Henry

Marion Waters

Marta Rosen

Jimmy Chambers

Gary Priester

BOARD MEMBER

Tom

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA

INTERDEPARTMENTAL CORRESPONDENCE

FILE

EDS-545(24), Toombs County

P.I. No. 522180

OFFICE

Environment/Location

DATE

TE July 12, 2001

FROM

Harvey D. Keepler, State Environmental/Location Engineer

TO

C. Wayne Hutto, Assistant Director of Preconstruction

SUBJECT

Revised Project Concept Report – US 1/SR 4 Improvements

Attached is the original copy of the revised Concept Report for your further handling for approval in accordance with the Plan Development Process (PDP).

The proposed changes to the approved concept would be revisions to the alignment, project length, and speed design. The alignment would be revised to avoid impacts to three eligible historic resources and the Toombs Central School. The project length would be revised as a result of the SR15/SR 29 intersection realignment. Finally, the speed design of the approved concept would be increased from 55 mph to 65 mph in accordance with the Department's current GRIP policy.

The revised concept as presented herein and submitted for approval is consistent with that which is included in the State Transportation Improvement Program (STIP).

DATE 7-17-01

State Transportation Planning Administrator

Distribution:

David Mulling Marion Waters Marta Rosen Herman Griffin Jim Chambers Gary Priester Paul Liles

REVISED PROJECT CONCEPT REPORT

Need and Purpose: US 1/SR 4 is the major north-south corridor in mid-east Georgia and is part of the Governor's Road Improvement Program. The proposed multi-laning of US 1/SR 4 would eliminate congestion and enhance the traffic flow, while improving the operational characteristics and the safety along US 1/SR 4.

Project Location: The project would be located along US 1/SR 4 in Toombs County from mile post 7.66 north to mile post 12.10.

Description of the approved concept: The approved concept for EDS-545(24) in Toombs County is proposed to widen and reconstruct US 1/SR 4 in Toombs County from SR 56 to SR 15/SR 29. The approved concept would begin at the intersection of SR 56 and US 1/SR 4 and proceed north as widening on the east side of the existing roadway. Widening would continue on the east side to the end of the project at SR 15/SR 29. The typical section would be four lanes with a 44 foot depressed grassed median and open ditch drainage. Existing right-of-way along US 1/SR 4 varies between 100 feet and 200 feet. The proposed right-of-way would vary from 184 feet to 250 feet for the length of the project. The speed design is 55 mph, and access would be by permit along the existing roadway.

PDP Classification: Major/Construction on new location

Full Oversight (), Exempt (X), SF(), Other ()

Functional Classification: Rural Principal Arterial

U. S. Route Number(s): 1 State Route Number(s): 4

Traffic (AADT) as shown in the approved concept:

Current Traffic Design Traffic

Year: 1998 AADT: 5600 Year: 2028 AADT: 8300

Proposed Features to be revised:

- 1. The speed design is recommended for revision.
- 2. The project length is recommended for revision.
- 3. The project alignment is recommended for revision.

Revised Location Concept Report EDS-545(24), Toombs July 12, 2001 Page 2 of 3

Revised feature(s) to be approved:

Updated traffic data (AADT):

- 1. In order to remain consistent with Department policy for GRIP Corridor roadways, the speed design would be 65 mph. To accommodate the new slopes, the proposed right-of-way would vary from 209 feet to 285 feet.
- 2. To improve the safety of the intersection of US 1/SR 4 with SR15/SR29, the intersection would be shifted north approximately 650 feet to coincide with the CR 117/Harndon Road intersection at mile point 12.22. The result would be a 4 legged intersection with a safer intersection alignment for SR 15/SR 29.
- 3. To avoid three eligible historic resources, Toombs Central School, and minimize wetland impacts along US 1, the alignment would be revised. The revised concept would begin at the intersection of SR 56 and EDS-545(23), approximately 0.3 miles east of existing US 1/SR 4 and proceed north on new location for 0.6 miles. It would tie into existing US 1/SR at CR 108/Paul Lockley Road and continue north as widening to the east side to CR 322/C H Slayton Road. It would then shift to west side widening and continue north to the existing SR 15/SR 29 intersection. At existing SR 15/SR29, widening would transition to the east side and be completed at the ending terminus, the CR 117/Harndon Road relocated SR 15/SR 29 intersection. Access would be by permit along the existing roadway and partially controlled on new location. The project length would be approximately 4.6 miles.

Current Traffic Year: 2008 AADT: 5500			Year:		gn Traff AAD	ïc r: 8000
Programmed/Sch P.E. <u>FY</u>		R/W	FY 2005	Constr	uction_	FY 2006
Revised Cost Est 1. Construction 2. Right-of-ware	n cost includi	ng inflatio	n and E&C:			\$7,602,000 \$2,525,000
Is the project loc	ated in a Non	ı-attainme	nt area?	Yes.	X	_No

Revised Location Concept Report EDS-545(24), Toombs July 12, 2001 Page 3 of 3

Recommendation: It is recommended that the proposed revisions to this concept be approved for implementation.

HDK/EKP

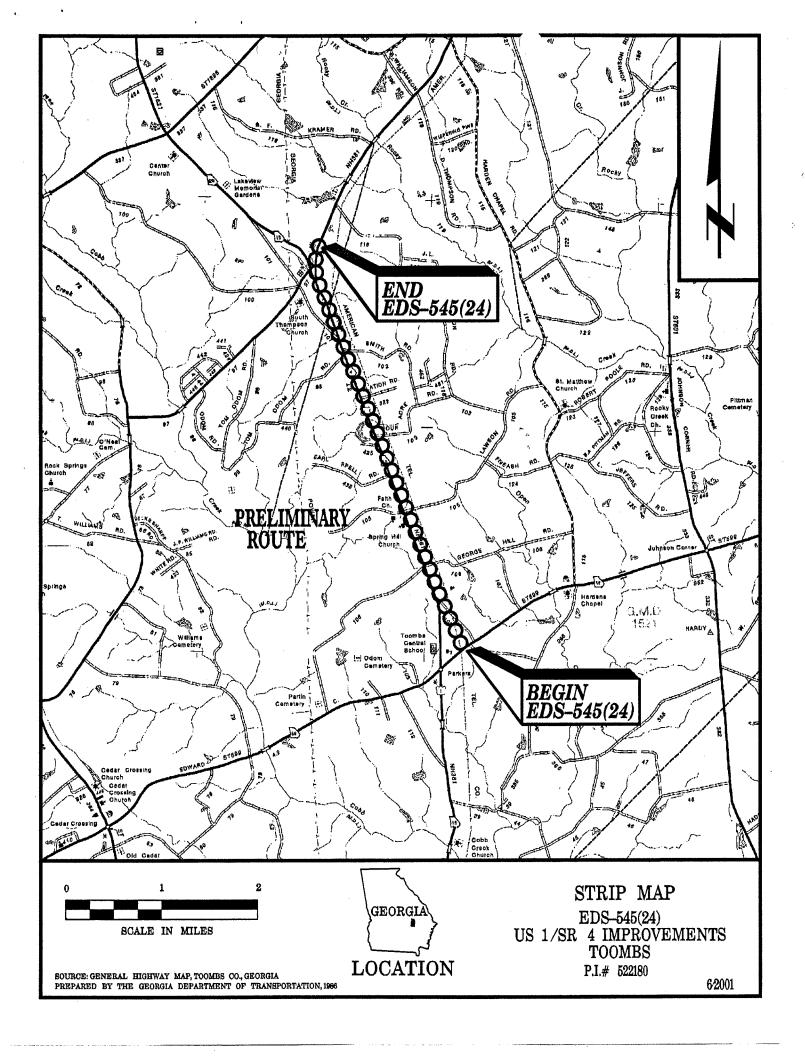
Attachments:

- 1. Sketch Map,
- 2. Cost Estimate
- 3. Typical Sections

Concur: Hum Director of Preconstruction

Approve:

Chief Engine



PRELIMINARY COST ESTIMATE

Office of Environment/Location

June 22, 2001 County(s) Toombs Project Number EDS-545(24) PI Number 522180 **Project Length** Project Name US 1/SR 4 Improvements **Miles** 4.6 **Project Description** US 1/SR 4 From SR 56 to SR 15/SR 29 in Toombs County **Existing Roadway** 2 Lanes Rural **Comments** TRAFFIC: Current Design Year 2008 Daily Volume (AADT) 5,500 Future Design Year 2028 Daily Volume (AADT) 8,000 **Concept Estimate** Feasibility Estimate Typical Section(s) Used in Estimate **Typical Section Length** Rural New Location: 4-Lanes with 44 ft Divided Median 0.62 Miles Rural Widening: 2 To 4-Lanes with 44 ft Divided Median 3.71 Miles Miles Miles **Miles**

Miles

Prepared By Keith Posey

Typical Section

Rural New Location: 4-Lanes with 44 ft Divided Median

Typical Section Length

0.62 **Miles**

Right-of-Way Width

250 Feet

GRADING AND DRAINAGE

- 1. EARTHWORK
 - a. Unclassified Excavation Soil
 - b. Unclassified Excavation Rock
 - c. Borrow Excavation
- 2. MINOR DRAINAGE

QUANTIT	Y	UNIT COST	TOTAL
27,800	CY	2.50	70,000
	CY	10.00	
	CY	3.72	·
0.62	МІ	101,000	63,000

GRADING AND DRAINAGE SUBTOTAL \$133,000

DASE AND PAVING	ND PAVING	AND	BASE
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1. GRADED AGGREGATE BASE

- 2. ASPHALT PAVING
 - a. Asph Conc 9.5 mm Superpave
 - b. Asph Conc 19 mm Superpave
 - c. Asph Conc 25 mm Superpave
 - d. Bituminous Tack Coat
- 3. CONCRETE PAVING
 - a. Curb and Gutter
- b. Miscellaneous
- 4. OTHER PAVING

THICKNESS AND SPREAD RATE	QUANTI	Γ¥	UNIT COST	TOTAL
10"	13,705	TN	13.05	179,000
		1.00		
1 1/2" (165 LB/SY)	1,951	TN	34.55	67,000
3" (330 LB/SY)	3,901	TN	34.54	135,000
4" (440 LB/SY)	4,161	TN	34.62	144,000
	2,247	GL	0.82	2,000
·	0	LF	9.39	0
	0	MI	42,000	0
_				53,000

BASE AND PAVING SUBTOTAL

\$580,000

LUMP ITEMS

- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. LANDSCAPING
- 4. EROSION CONTROL
- 5. SIGNING/STRIPING
- 6. OTHER

QUANTIT	Y	UNIT COST	TOTAL	
0.62	MI	41,000	25,000	
19	AC	6,000	113,000	
0.62	MI	80,002	50,000	
0.62	MI	97,000	60,000	
0.62	МІ	19,321	12,000	
0.62	МІ	96,000	60,000	
LUMP I	LUMP ITEM SUBTOTAL			

MISCELLANEOUS

- 1. GUARDRAIL
 - a. GUARDRAIL ANCHORS
- 2. DETOURS

QUANTIT	Y	UNIT COST	TOTAL
2,400	LF	10.11	24,000
8	EA	435.59	3,000
	MI	300,000.00	0
MISCELLAN	EOU	S SUBTOTAL	\$27,000

SPECIAL FEATURES

Typical Section

Rural Widening: 2 To 4-Lanes with 44 ft Divided Median

Typical Section Length

3.71 **Miles**

Right-of-Way Width

250

Feet

GRADING AND DRAINAGE

- 1. EARTHWORK
 - a. Unclassified Excavation Soil
 - b. Unclassified Excavation Rock
 - c. Borrow Excavation
- 2. MINOR DRAINAGE

QUANTIT	Y	UNIT COST	TOTAL
248,000	CY	2.50	620,000
	CY	10.00	
	CY	3.72	,
3.71	MI	100,927	374,000
C AND DDAIN	JACI	CIRTOTAL	¢004 000

GRADING AND DRAINAGE SUBTOTAL \$994,000

B	A	SE	Al	M	PA	VIN	\mathbf{G}
SJ.				11/	1 (1		•

1. GRADED AGGREGATE BASE

- 2. ASPHALT PAVING
 - a. Asph Conc 9.5 mm Superpave
 - b. Asph Conc 19 mm Superpave
 - c. Asph Conc 25 mm Superpave
 - d. Bituminous Tack Coat
- 3. CONCRETE PAVING
 - a. Curb and Gutter
 - b. Miscellaneous
- 4. OTHER PAVING

THICKNESS AND SPREAD RATE	QUANTI	ГҮ	UNIT COST	TOTAL
10"	48,710	TN	13.05	636,000
1 1/2" (165 LB/SY)	11,672	TN	34.55	403,000
3" (330 LB/SY)	14,724	TN	34.54	509,000
4" (440 LB/SY)	13,407	TN	34.62	464,000
	8,933	GL	0.82	7,000
	0	LF	9.39	0
	0	МІ	28,410	0
_				202,000

BASE AND PAVING SUBTOTAL

\$2,221,000

LUMP ITEMS

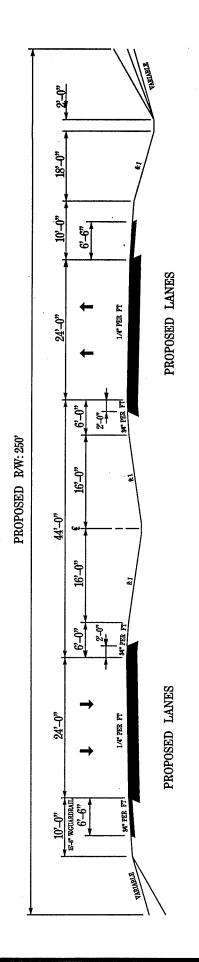
- 1. TRAFFIC CONTROL
- 2. CLEARING AND GRUBBING
- 3. LANDSCAPING
- 4. EROSION CONTROL
- 5. SIGNING/STRIPING
- 6. OTHER

QUANTIT	Y	UNIT COST	TOTAL
3.71	MI	88,000	326,000
112	AC	6,000	675,000
3.71	MI	40,527	150,000
3.71	MI	99,000	367,000
3.71	MI	17,594	65,000
3.71	МІ	110,500	410,000
LUMP I	TEM	SUBTOTAL	\$1,993,000

ESTIMATE SUMMARY

Typical Section	Section Cost (per mile)
 Rural New Location: 4-Lanes with 44 ft Divided Median Rural Widening: 2 To 4-Lanes with 44 ft Divided Median 	\$1,666,000 \$1,404,000

PROJECT COST	
A. MAJOR STRUCTURES	
B. GRADING AND DRAINAGE	\$1,127,000
C. BASE AND PAVING	\$2,801,000
D. LUMP ITEMS	\$2,313,000
E. MISCELLANEOUS	\$27,000
F. SPECIAL FEATURES	
SUBTOTAL CONSTRUCTION COST	\$6,268,000
E. & C. (10%)	\$627,000
INFLATION 2 yrs @ 5 % per yr	\$706,738
GRAND TOTAL CONSTRUCTION COST	\$7,602,000

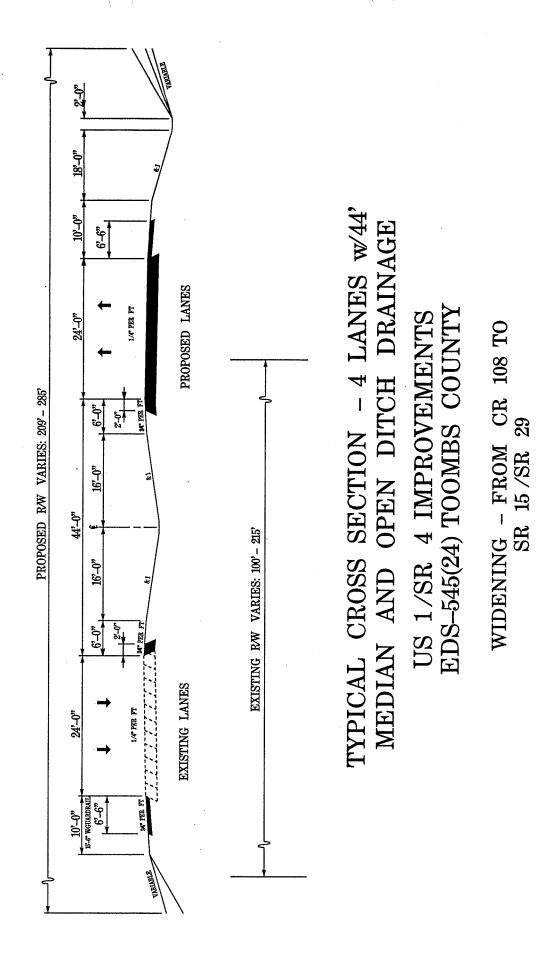


TYPICAL CROSS SECTION – 4 LANES w/44' MEDIAN AND OPEN DITCH DRAINAGE

US 1/SR 4 IMPROVEMENTS EDS-545(24) TOOMBS COUNTY

NEW LOCATION – FROM SR 56 TO CR 108

NOT TO SCALE



NOT TO SCALE